AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A media stream system which processes plural media streams, each media stream comprising packets of media information, the system comprising:

plural processors, each of the plural processors executing at least one of plural types of media stream processing functions;

a switch function which routes the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

wherein a packet size for the packets is chosen to minimize overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors.

2. (Original) The system of claim 1, wherein the packet size for a packet of media information is chosen to be 160 octets.

3. (Original) The system of claim 1, wherein consecutive packets of a same media stream being separated by a packet repetition interval.

4. (Original) The system of claim 3, wherein the packet repetition interval between consecutive packets of the same media stream is 20 milliseconds.

5. (Original) The system of claim 1, wherein the number of plural media streams is nine.

6. (Original) The system of claim 1, wherein the plural media streams are one of plural voice channels and plural video channels.

7. (Original) The system of claim 1, wherein the switch asynchronously routes the packets of the plural media streams to a sequence of the plural processors.

8. (Original) The system of claim 7, wherein for at least one of the plural processors there is a queue for temporarily storing a packet received while the at least one of the plural processors performs its media stream processing function relative to another packet.

9. (Original) The system of claim 1, wherein at least one of the plural processors is a digital signal processor (DSP).

10. (Original) The system of claim 1, wherein the plural types of media stream processing functions include at least one of the following: speech coding; speech decoding; echo cancellation; tone sender; tone receiver; DTMF sender; DTMF receiver; conference call device (CCD); announcement machine; FAX modem; voice recogition; and U-lag/A-lag conversion; an interfacing functionality to an external network (such as TDM, ATM, IP and Frame Relay networks); video codec, text processing, modem for either circuit switched or packet switched data.

11. (Currently Amended) ~~The system of claim 1,~~ A media stream system which processes plural media streams, each media stream comprising packets of media information, the system comprising:

plural processors, each of the plural processors executing at least one of plural types of media stream processing functions;

a switch function which routes the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

wherein a packet size for the packets is chosen to minimize overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors;

wherein the overhead load includes operations of resuming and suspending execution of a media stream processing function for packets of different media streams.

12. (Currently Amended) ~~The system of claim 1,~~ A media stream system which processes plural media streams, each media stream comprising packets of media information, the system comprising:

plural processors, each of the plural processors executing at least one of plural types of media stream processing functions;

a switch function which routes the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

wherein a packet size for the packets is chosen to minimize overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors;

~~further comprising~~ an interface device which connects the system to a network wherein the packets of the plural media streams are transmitted synchronously, wherein the interface device performs a synchronization with respect to the packets which have been asynchronously routed through the system.

13. (Original) The system of claim 1, wherein the switch function comprises one of a packet switch and a cell switch.

14. (Original) The system of claim 1, wherein the switch function comprises one of a packet-based and a cell-based network.

15. (Original) A method of handling plural media streams, each media stream comprising packets of media information, the method comprising:

executing plural types of media stream processing functions at plural processors;

routing the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

choosing a packet size for the packets to minimize overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors.

16. (Original) The method of claim 15, further comprising choosing the packet size for a packet of media information to be 160 octets.

17. (Original) The method of claim 15, further comprising separating consecutive packets of a same media stream by a packet repetition interval.

18. (Currently Amended) The method of claim ~~15~~17, further comprising choosing the packet repetition interval between consecutive packets of the same media stream to be 20 milliseconds.

19. (Original) The method of claim 15, wherein the number of plural media streams is nine.

20. (Original) The method of claim 15, wherein the plural media streams are one of plural voice channels and plural video channels.

21. (Original) The method of claim 15, further comprising asynchronously routing the packets of the plural media streams to a sequence of the plural processors.

22. (Original) The method of claim 21, further comprising, for the at least one of the plural processors, providing a queue for temporarily storing a packet received while the at least one of the plural processors performs its media stream processing function relative to another packet.

23. (Original) The method of claim 15, further comprising including at least one of the following as one of the plural types of media stream processing functions: speech coding; speech decoding; echo cancellation; tone sender; tone receiver; DTMF sender; DTMF receiver; conference call device (CCD); announcement machine; FAX modem; voice recogition; and U-lag/A-lag conversion; an interfacing functionality to an external network (such as TDM, ATM, IP and Frame Relay networks); video codec, text processing, modem for either circuit switched or packet switched data.

24. (Currently Amended) ~~The method of claim 15,~~ A method of handling plural media streams, each media stream comprising packets of media information, the method comprising:

executing plural types of media stream processing functions at plural processors;

routing the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

choosing a packet size for the packets to minimize overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors;

wherein the overhead load includes operations of resuming and suspending execution of a media stream processing function for packets of different media streams.

25. (Currently Amended) ~~The method of claim 15, further comprising~~ A method of handling plural media streams, each media stream comprising packets of media information, the method comprising:

executing plural types of media stream processing functions at plural processors;

routing the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

choosing a packet size for the packets to minimize overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors;

providing an interface device to connect the system to a network wherein the packets of the plural media streams are transmitted synchronously, and using the interface device to perform a synchronization with respect to the packets which have been asynchronously routed through the system.

26. (Original) The method of claim 15, wherein the step of routing the packets of the plural media streams involves employing one of a packet switch and a cell switch to route the packets.

27. (Original) The method of claim 15, wherein the step of routing the packets of the plural media streams involves employing one of a packet based network and a cell based network to route the packets.

28. (Original) A media stream system which processes plural media streams, each media stream comprising packets of media information, the system comprising:

plural processors, each of the plural processors executing at least one of plural types of media stream processing functions;

a switch function which asynchronously routes the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

wherein a packet size for the packets is chosen to be 160 octets.

29. (Currently Amended) The system of claim 28, wherein consecutive packets of a same media stream are separated by a packet repetition interval[[ ]].

30. (Original) The system of claim 29, wherein the packet repetition interval between consecutive packets of the same media stream is 20 milliseconds.

31. (Original) The system of claim 28, wherein the number of plural media streams is nine.

32. (Original) The system of claim 28, wherein the plural media streams are one of plural voice channels and plural video channels.

33. (Original) The system of claim 28, wherein for at least one of the plural processors there is a queue for temporarily storing a packet received while the at least one of the plural processors performs its media stream processing function relative to another packet.

34. (Original) The system of claim 28, wherein at least one of the plural processors is a digital signal processor (DSP).

35. (Original) The system of claim 28, wherein the plural types of media stream processing functions include at least one of the following: speech coding; speech decoding; echo cancellation; tone sender; tone receiver; DTMF sender; DTMF receiver; conference call device (CCD); announcement machine; FAX modem; voice recogition; and U-lag/A-lag conversion; an interfacing functionality to an external network (such as TDM, ATM, IP and Frame Relay networks); video codec, text processing, modem for either circuit switched or packet switched data.

36. (Currently Amended) ~~The system of claim 28, further comprising~~ A media stream system which processes plural media streams, each media stream comprising packets of media information, the system comprising:

plural processors, each of the plural processors executing at least one of plural types of media stream processing functions;

a switch function which asynchronously routes the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

wherein a packet size for the packets is chosen to be 160 octets;

an interface device which connects the system to a network wherein the packets of the plural media streams are transmitted synchronously, wherein the interface device performs a synchronization with respect to the packets which have been asynchronously routed through the system.

37. (Original) The system of claim 28, wherein the switch function comprises one of a packet switch and a cell switch.

38. (Original) The system of claim 28, wherein the switch function comprises one of a packet-based and a cell-based network.

39. (Previously Presented) A media stream system which processes plural media streams, each media stream comprising packets of media information, the system having:

plural processors, each of the plural processors executing at least one of plural types of media stream processing functions;

a switch function which routes the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

wherein a packet size for the packets is chosen to lower overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors, and wherein the overhead load includes operations of resuming and suspending execution of a media stream processing function for packets of different media streams.

40. (Previously Presented) A method of handling plural media streams, each media stream comprising packets of media information, the method comprising:

executing plural types of media stream processing functions at plural processors;

routing the packets of the plural media streams to a sequence of the plural processors whereby the plural types of media stream processing functions are sequentially performed relative to the packets;

choosing a packet size for the packets to reduce overhead load on at least one of the plural processors without causing undue delay for a packet awaiting processing by the at least one of the plural processors, wherein the overhead load includes operations of resuming and suspending execution of a media stream processing function for packets of different media streams.

41. (New) The system of claim 39, wherein the packet size for a packet of media information is chosen to be 160 octets.

42. (New) The system of claim 39, wherein consecutive packets of a same media stream being separated by a packet repetition interval.

43. (New) The system of claim 42, wherein the packet repetition interval between consecutive packets of the same media stream is 20 milliseconds.

44. (New) The system of claim 39, wherein the number of plural media streams is nine.

45. (New) The system of claim 39, wherein the plural media streams are one of plural voice channels and plural video channels.

46. (New) The system of claim 39, wherein the switch asynchronously routes the packets of the plural media streams to a sequence of the plural processors.

47. (New) The system of claim 46, wherein for at least one of the plural processors there is a queue for temporarily storing a packet received while the at least one of the plural processors performs its media stream processing function relative to another packet.

48. (New) The system of claim 39, wherein at least one of the plural processors is a digital signal processor (DSP).

49. (New) The system of claim 39, wherein the plural types of media stream processing functions include at least one of the following: speech coding; speech decoding; echo cancellation; tone sender; tone receiver; DTMF sender; DTMF receiver; conference call device (CCD); announcement machine; FAX modem; voice recogition; and U-lag/A-lag conversion; an interfacing functionality to an external network (such as

TDM, ATM, IP and Frame Relay networks); video codec, text processing, modem for either circuit switched or packet switched data.

50. (New) The method of claim 40, further comprising choosing the packet size for a packet of media information to be 160 octets.

51. (New) The method of claim 40, further comprising separating consecutive packets of a same media stream by a packet repetition interval.

52. (Currently Amended) The method of claim 51, further comprising choosing the packet repetition interval between consecutive packets of the same media stream to be 20 milliseconds.

53. (New) The method of claim 40, wherein the number of plural media streams is nine.

54. (New) The method of claim 40, wherein the plural media streams are one of plural voice channels and plural video channels.

55. (New) The method of claim 40, further comprising asynchronously routing the packets of the plural media streams to a sequence of the plural processors.

56. (New) The method of claim 55, further comprising, for the at least one of the plural processors, providing a queue for temporarily storing a packet received while the at least one of the plural processors performs its media stream processing function relative to another packet.

57. (New) The method of claim 40, further comprising including at least one of the following as one of the plural types of media stream processing functions: speech coding; speech decoding; echo cancellation; tone sender; tone receiver; DTMF sender; DTMF receiver; conference call device (CCD); announcement machine; FAX modem; voice recogition; and U-lag/A-lag conversion; an interfacing functionality to an external network (such as TDM, ATM, IP and Frame Relay networks); video codec, text processing, modem for either circuit switched or packet switched data.